WHAT IS CLAIMED IS:

1.   A channel device comprising:

a substrate comprising a plurality of channels for electrophoretic separation; and

a plurality of deflectable cilia in fluid communication with the plurality of channels, wherein the deflectable cilia are adapted to loading the plurality of channels from a multi-well tray.

2.   The channel device of claim 1, wherein the deflectable cilia are adapted for deflection by a support.

3.   The channel device of claim 1, wherein the deflectable cilia are adapted for deflection by an active mechanism.

4.   The channel device of claim 1, wherein the substrate comprises a detection zone.

5.   A system for electrophoretic separation comprising:

a channel device comprising a substrate comprising a plurality of channels and a plurality of deflectable cilia in fluid communication with the plurality of channels;

a multi-well tray; and

a support adapted to deflect the cilia to load the channels from the multi-well tray.

6.   The system of claim 5, further comprising a controller adapted to position at least one of the channel device, the multi-well tray, and the support.

7.   The system of claim 6, further comprising a CPU adapted to direct the controller.

8.   The system of claim 7, further comprising a detector adapted to collect electrophoretic separation information at a detection zone on the channel device.

9.   The system of claim 8, wherein the detector is in electrical communication with the CPU to correlate loading information from the controller and electrophoretic separation information from the detector.

10.   The system of claim 5, further comprising a buffer tray, wherein the support is adapted to deflect each of the cilia into the buffer tray.

11.   A loading mechanism for a channel device comprising:
a plurality of deflectable cilia adapted to fluidly communicate with a plurality of channels in a substrate for electrophoretic separation, wherein the deflectable cilia are adapted to loading the plurality of channels from a multi-well tray; and
a support adapted to deflect the cilia to load the channels from the multi-well tray.

12.   The loading mechanism of claim 11, wherein the support comprises of posts to deflect individual cilia.

13.   The loading mechanism of claim 12, wherein the posts are configured such that the support can load from a row of the multi-well tray with each deflection.

14.   The loading mechanism of claim 12, wherein the channels are configured such that the support can load from a row of the multi-well tray with each deflection.

15.   The loading mechanism of claim 12, wherein each well in the multi-well tray corresponds to a different channel in the channel device.

16.   The loading mechanism of claim 11, wherein the cilia comprise a shape-memory alloy adapted to provide resilience to return the cilia to an initial position after the deflection.

17.   The loading mechanism of claim 11, wherein the cilia comprise a tendon element to control the deflection.

18.   The loading mechanism of claim 11, wherein the cilia comprise an active mechanism to control the deflection.

19.   The loading mechanism of claim 11, wherein the cilia are deformable.

20.   A method for loading a channel device comprising:
providing a multi-well tray; and
deflecting at least one cilium from plurality of cilia adapted to fluidly communicate with a plurality of channels in the channel device.

21.   The method of claim 20, wherein deflecting comprises positioning a support to deflect at least one cilium.

22.   The method of claim 21, further comprising positioning at least one of the channel device and the multi-well tray to align the cilia to posts connect to the support.

23.   The method of claim 22, further comprising loading sample from the multi-well tray into the channels.

24.   A method for electrophoretic separation comprising:
providing a channel device comprising a substrate comprising a plurality of channels and a plurality of deflectable cilia in fluid communication with the plurality of channels;
providing a multi-well tray;

providing a loading mechanism to deflect the cilia to load the channels from the multi-well tray;

deflecting at least one cilium to load at least one sample from the multi-well tray;

deflecting the plurality of cilia into a buffer tray; and

providing electric current for the electrophoretic separation.

25.   The method of claim 24, further comprising loading the channel device.

26.   The method of claim 25, wherein loading comprises positioning at least one of the channel device and the multi-well plate.

27.   The method of claim 24, further comprising detecting electrophoretic separation information from a detection zone on the channel device.